



FEMP works to reduce the cost and environmental impact of the Federal government by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at Federal sites.

Deployment of Distributed Generation: Sources of Financial Assistance and Information

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Financial assistance to Federal agencies is available from several sources to help reduce the cost of installing Distributed Generation (DG) at their facilities. FEMP has undertaken this effort to identify sources of funding that may be available to Federal agencies like yours for the implementation of DG projects. This document has been designed to briefly summarize the potential funding source and provide you, the user, with a quick link to the web address where more detailed information about DG can be found.

In summary, three types of funding sources may be available for Federal DG projects: DOE support, state programs, and utility programs. Although Federal support for energy technologies is aimed primarily at research and development, some financial support is becoming available for DG deployment. When states have funding programs, they are typically at a higher dollar level than the more limited Federal programs. Some state public service commissions mandate that investor-owned utilities sponsor incentives for DG, energy efficiency, and renewable energy. Other utilities voluntarily offer these incentives to their customers as a contribution to demand control.

Financial Assistance

Several sources of funding may be available for Federal DG projects. This section outlines a few of the probable options.

The following provides an overview of **all** Federal Financial Assistance Opportunities at the Department of Energy. This document is not targeted specifically to DG: <http://fedgrants.gov/Applicants/>

The Office of Science is the largest source of financial assistance funding in DOE. Their Home Page, at <http://www.er.doe.gov/production/grants/grants.html> contains program descriptions, a *Grant Application Guide*, forms, staff contacts and listings of available solicitations.

Current Distributed Generation Solicitations are listed in the following site, maintained by the USDOE: http://www.eren.doe.gov/der/news_events.html#solicitations

UPDATE: Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project Solicitation
See http://www.eere.energy.gov/hydrogenandfuelcells/2003_solicitation_notice.html for the complete solicitation.

Under this Solicitation, DOE is soliciting Applications for Validation projects that include the testing, demonstration, and validation of hydrogen fuel cell vehicles and infrastructure, and the required vehicle and infrastructure interfaces for complete system solutions. The Validation projects should also include a comprehensive safety plan, a program that enhances the development of codes and standards, and a comprehensive, integrated education and training campaign.

Proposals are due August 14, 2003.

Teaming is required for any proposal, and may consist of any of the following entities, as appropriate (note that item 1 is a requirement):

1. An automobile manufacturer and an energy company (both are required to be included on a team for this Solicitation);
2. A hydrogen supplier;
3. A fuel cell supplier;
4. Utility and/or gas company;

5. A fleet operator of vehicles (private, local, state, or federal fleets);
6. System and component suppliers;
7. Small businesses;
8. Universities, educational, and outreach organizations;
9. State, local, and **federal** government entities.

Either the automobile manufacturer or the energy company shall be proposed as the Applicant (and, thus, the recipient of any resulting Award), with other team members being sub-recipients to the Applicant.

Distributed Generation Grants in California

At this time, the Energy Commission is not accepting applications for funding under this grant incentive program. The State Budget for Fiscal Year 2002/03 does not provide funding for the Solar Energy and Distributed Generation Grant Program for the current fiscal year. This small grant program for solar water heating, battery backup and selected DG systems is authorized until January 1, 2006, to the extent funds are appropriated in the annual Budget Act.

The DOE Distributed Energy and Electric Reliability Regional Combined Heating Cooling and Power Applications Centers provides information on solicitations and other activities.

System Benefit Funds (SBF)

As some states restructured their electric utility industries, 22 states have created pockets of dollars funded by electric customers. These programs help support certain energy policy goals, such as renewable energy development, energy efficiency incentives, energy research and development, and support for low-income customers. The charge to ratepayers varies by state (ranging from .5% to 4%), averaging about 3% of the customer's electric bill. States have the option of creating these funding sources without restructuring their electric power industry (Wisconsin is an example). Depending upon the specific design in each state, these dollars are administered either by utilities, non-profit organizations, or state agencies. Information on each state funding program is available at FEMP's [Utility Management Web site](#). It has the latest state-by-state information on opportunities to participate in energy efficiency and load management programs offered by utilities and other agencies. According to the American Council for Energy Efficient Economy <http://www.aceee.org>, the amount of state funds available in the U.S. totals \$1.697 billion. The emphasis on SBF allocation appears to be shifting somewhat towards peak reduction. An overview on SBF is contained at the following website:

<http://www.state.hi.us/dbedt/ert/symposium/brown/brown.html>

Two states in particular, California and New York, have large SBF programs.

- For **California** information, see the following sites:
FEMP site: http://www.eren.doe.gov/femp/resources/dir_caupdates.html
California Energy Commission site: <http://www.energy.ca.gov>
- For **New York** information, see the New York State Energy Research and Development Authority: [NYSERDA - New York Energy Smart Programs](#). A complete list of NYSERDA's Program Opportunity Notices (PONs) is available on the web site at <http://www.nyserda.org/rddopps.html>.

Since state laws, rules, and programs are subject to change, energy managers are encouraged to regularly check the current status of state SBF policy and financial opportunities flowing from the SBF to support DG projects. A fast way to accomplish this is to visit the following DOE website: http://www.eren.doe.gov/state_energy/states.cfm.

Financing DER and CHP Projects

Are you unable to secure agency appropriated funding for your DER or CHP project? Agencies have already begun to finance CHP and DER projects through energy savings performance contracts (ESPCs), utility energy service contracts (UESCs), or other financing vehicles. To learn more about these alternative financing vehicles and how FEMP can assist, see <http://www.eren.doe.gov/femp/financealt.html>.

[Financing Distributed Generation](#) is an 11-page report produced by Dr. Andy Walker of the National Renewable Energy Laboratory's FEMP Program. The paper discusses several mechanisms for financing DG projects.

Other Regulatory and Funding Information

In addition to the information here, it is also recommended that Federal energy managers view the *Database for State Incentives for Renewable Energy*, located at <http://www.dcs.ncsu.edu/solar/dsire/finframe.html>. This web site, which lists recent updates to state renewable support programs, is managed by the Interstate Renewable Energy Council, funded by the U.S. Department of Energy's Office of Power Technologies and managed by the North Carolina Solar Center.

Combined Heat and Power Projects

Through its **ADD CHP** initiative (Accelerated Development and Deployment of CHP), FEMP is fielding requests for help from agencies interested in CHP. The following ADD CHP services and offerings may be of assistance.

Is CHP right for your facility? FEMP has a [free CHP screening](#) service for Federal sites. An on-line form requires only minimal input from facility managers. This initial screening helps determine if more detailed analysis for your facility is worth the effort. To learn more, go to http://www.eren.doe.gov/femp/techassist/der_resources.html.

A FEMP **market assessment** indicates that CHP could be successfully applied in 9% of large federal facilities, in projects that would have an average simple payback of 7 years. "CHP Potential at Federal Sites," September 2002, encapsulates the information in FEMP's *Analysis of CHP Potential at Federal Sites*. Both documents are available in pdf under the CHP area at <http://www.ornl.gov/femp/index.html>.

A paper prepared for the October 2002 World Energy Efficiency Congress, *Funds for Energy Efficiency Projects*, discusses issues affecting CHP deployment, the strategy to expedite CHP projects, and progress to date. E-mail a request for the Association of Energy Engineers Conference paper to sherrodmj@ornl.gov.

Wind Projects

The American Wind Energy Association (AWEA) in March 2001 produced an *Inventory of State Incentives for Wind Energy in the U.S.* The inventory provides a state-by-state survey, with information about the local wind resource and about financial, economic, and regulatory incentives for wind energy in each state.

See: <http://www.awea.org/policy/index.html#State Policies>.

A state-by-state list of wind energy application incentives is available at <http://www.awea.org/pubs/inventory.html>.

Private Sector Guidebooks

Some private companies prepare guidebooks of funding sources and incentives for DG, such as the following information from Energy Info Source: http://www.energyinfosource.com/dg/dg_links.cfm

FEMP does not endorse private products, and FEMP recognizes that other companies may offer similar reports. The omission of other reports is not intended to endorse reports that have been referenced.

FEMP Publications

Implementing a successful DG project involves several steps. FEMP's ["Using Distributed Energy Resources: A How-To Guide for Federal Facility Managers"](#) addresses the process for getting a DG system up and running at your site.

The FEMP DER and CHP Web site provides a link to other valuable information resources:
http://www.eere.energy.gov/femp/techassist/der_resources.html

Massachusetts DG Guidebook

The [Renewable Energy & DG Guidebook](#) provides an overview of many DG issues, such as siting, that must be addressed in DG applications.

Links for More Information

The following web sites have additional information on DG:

Federal web sites

Department of Energy – Federal Energy Management Program (FEMP)

<http://www.eren.doe.gov/femp>

FEMP DER and CHP Program

http://www.eere.energy.gov/femp/techassist/der_resources.html

Department of Energy – Distributed Generation Program

<http://www.eren.doe.gov/der>

Department of Energy – Regional Offices

<http://www.eren.doe.gov/rso.html>

Department of Energy – Business Opportunities

<http://e-center.doe.gov/>

FEMP Design Assistance Program

<http://www.eren.doe.gov/femp/techassist/designassist.html>

FEMP Renewable Generation

<http://www.eren.doe.gov/femp/techassist/renewenergy.html>

Energy Information Administration

<http://www.eia.doe.gov>

Federal Incentives for Commercial Solar Applications

http://www.mdv-seia.org/federal_incentives.htm

U.S. Environmental Protection Agency

<http://www.epa.gov>

Industry and other web sites

Alliance to Save Energy

<http://www.ase.org/>

American Wind Energy Association

<http://www.awea.org>

Association Council for Energy Efficient Economy

<http://www.aceee.org>

Distributed Power Coalition of America

<http://www.distributed-generation.com/dpca/>

Edison Electric Institute

<http://www.eei.org>

Electricity Storage Association

<http://www.electricitystorage.org/>

Energy-efficient Product Information

<http://www.energystar.gov>

Fuel Cell Developers

<http://216.51.18.233/fcdevel.htm>

Institute of Electrical and Electronics Engineers

<http://www.ieee.org>

Interstate REC Interconnection Newsletter

<http://www.irecusa.org/connect/enewsletter.html>

National Association of Regulatory Utility Commissioners

<http://www.naruc.org>

Online Fuel Cell Information Center

<http://www.fuelcells.org>

Public Technology, Inc.

<http://pti.nw.dc.us/index.html>

Solar Buzz

<http://www.solarbuzz.com>

Solar Energy Industries Association

<http://www.seia.org>

United States Fuel Cell Council

<http://www.usfcc.com>